

Year 10 · Sequences — Learning objectives

What students should be able to do by the end of this unit.

1. I can representing sequences as pictures, tables, graphs and algebra.
2. I can determine the general rule from shifted number sequences, e.g. 1 less than square numbers, $u_n = n^2 - 1$.
3. I can determine the general rule of arithmetic sequences and solve to find u_1 and d .
4. I can determine the general rule of geometric sequences and solve to find u_1 and r .
5. I can working backwards to find u_1 , r , d and n .
6. I can use properties of sequences to solve for unknowns.
7. I can determine a recursive sequence for arithmetic and geometric sequences using $u_{\{n+1\}} = u_n + d$ and $u_{\{n+1\}} = u_n * r$.